and the bacteriologist have been laid under tribute. And, as the product of their labors and genius, we have some of the most remarkable methods that have ever been applied to the study of disease.

REPORT OF A FEW CASES OF APPENDICITIS.

Read before the Camden City Medical Society, Nov. 3, 1897.

BY O. W. BRAYMER, M.D., PH.D.
CAMDEN, N. J.

I shall only report the histories of a few cases that have recently come under my care and not undertake to give an extensive digest of the history of appendicitis and its treatment.

Case 1.—T. R., male, aged 17 years, a farm hand, had been taken at about 8 A.M. with severe cramp-like pains in the abdomen, on the right side, low down, two days before coming to the Cooper Hospital. On the day I first saw him he was suffering great pain in the right iliac region. There was some distention of the abdomen, a history of constipation, a tendency to lie with the right thigh flexed on the abdomen, marked tenderness over the region of the appendix, together with tension of the abdominal muscles of the right side, and a mass could be outlined beneath the muscular wall in this region. There was some rise of temperature and a look of intense suffering on the patient's countenance. It was decided that the case was one of appendicitis and that operation should be done at once. This had every appearance of being a case of so-called fulminating appendicitis. I operated in the afternoon of the same day that the patient was admitted and as soon as the incision was made over the region of the appendix and the cavity of the peritoneum opened there was present a fecal odor. The appendix was found to be gangrenous, firmly adherent to the under surface of the cecum and contained several coproliths. After carefully breaking up the adhesions the appendix was amputated and the stump inverted into the bowel. The wound in the cecum was closed by a double row of fine silk sutures; the darkened spots on the bowel where the appendix had adhered, were carefully cleansed and nothing more done with them, as the discoloration seemed to be only superficial. I did what I will never do again in such a case, viz.: irrigated the cavity with 1 to 10,000 bichlorid solution and followed this with distilled water. I am now of the opinion that normal saline solution is one of the best fluids to irrigate the cavity with, following such cases. The wound in the abdominal wall was closed by one layer of sutures and a space left for a drain of iodoform gauze.

This patient suffered great pain for many days after the operation and had considerable difficulty in getting his bowels to move, notwithstanding he had taken small doses of calomel from the first, followed by the salines. There was very little discharge of pus from the wound, and after about the usual length of time, where drainage is used, the opening closed. The patient entered the hospital June 23 and was up and around his room July 13, but still complained of some pain in the region of the pubes. He was allowed to go home about one week later, and at that time was in very good condition. He was sent back to the hospital in a few weeks, suffering with intestinal obstruction, having eaten a large quantity of summer squash.

An operation by one of my colleagues revealed a constricted strangulated bowel, with much gangrene, and through the softened tissues a vast number of squash seeds were pointing in various directions. The patient died. The obstruction which caused his death was partially due to the adhesions which had formed during the attack of appendicitis, yet the final result might perhaps have been avoided, had the patient been more careful of his diet.

Case 2.—A. B., male, aged 43 years, applied to me in March to get relief from an attack of severe abdominal pain and vomiting. He stated that he had been sick about three days, with coryza and la grippe. I found the man in a state of collapse, with general abdominal pain and vomiting. He was given morphin with atropin and strychnin hypodermatically and after about two hours was left in a fairly comfortable condition. Divided doses of calomel were given to clean out the intestinal tract and gradually the abdominal pain settled down to a point of greatest tenderness over the region of the appendix. There was a slight rise of temperature and some chilly sensations. The calomel moved the bowels satisfactorily, but there gradually developed an area of dulness in the right iliac region. There was a mass in the region of the appendix. He was removed to the hospital and was operated on at 9:30 P.M., March 18, 1897.

An incision over the prominent part of the swelling revealed about eight ounces of pus, which was evacuated and the cavity irrigated with a warm saline solution. A portion of omental tissue had been walled off by the pus pocket and, to avoid infection of the general peritoneal cavity, this portion of the omentum was ligated and removed. The wound in the peritoneum was closed with catgut, the muscular walls with kangaroo tendon and the skin with silkworm gut sutures, leaving an opening for drainage, the drain being composed of a small strip of iodoform gauze. This man had an uneventful recovery and three weeks after the operation was out and soon after resumed his business.

Case 3.—W. W., male, aged 21 years, came to the hospital April 12, 1897, with the following history: About two months previously he began to have attacks of severe abdominal pain, especially around the umbilicus and in the right iliac fossa, which pain had continued with more or less severity ever since. The bowels had been opened once or twice each day and there had been no nausea.

Examination showed great tenderness about the umbilicus and especially over McBurney's point, and the whole right side was tense and rigid. The patient when lying down kept the thigh flexed on the abdomen. No induration or fluctuation could be detected. The patient was told that he had chronic appendicitis and he decided to have the organ removed.

I made the usual incision through the abdominal walls, and found a thick, stiff appendix, pointing toward the umbilicus, somewhat adherent at the distal extremity and containing some fecal matter. The appendix was amputated close to the cecum. The stump was inverted into the cecum and the wound in the bowel closed by means of the Lembert suture, using two rows of sutures, made of number twelve black silk. The peritoneum, muscles and fascia were closed with kangaroo tendon, interrupted sutures, and the skin by silkworm gut. The patient had an uneventful recovery and was discharged cured May 4, 1897.

Case 4.—C. K., male, aged 19 years, came to the Cooper Hospital May 5, 1897, to obtain relief from excruciating pain in the abdomen, centering in the region of the appendix. This pain had been so severe during the past few days that it debarred him from any labor. Four years ago and again two months ago there had been similar attacks, but less severe. This attack began May 3, at 10 A. M., with sharp pains in the right inguinal region. There was no diarrhea or vomiting until after taking some soup the day before entering the hospital. Examination showed a tense abdomen, right thigh flexed when patient reclined, anxious countenance, tenderness in the right iliac region and a slight rise of temperature.

I operated upon him May 6, 1897. The appendix was found to have an adherent bulbous distal extremity; the adhesions were carefully broken up and the organ brought into view. The appendix was amputated near its colonic attachment, the stump was invaginated and the wound in the cecum closed with two rows of fine silk sutures, the peritoneum with a row of fine kangaroo tendon sutures and the muscles, fascia and aponeuroses were closed in a like manner. The skin was closed by a continuous intercutaneous suture, and the wound was dressed absolutely dry. There was some extravasation of blood under the skin, which on May 12 was discharged through the center of the opening. This discharge had a bad odor and at first was supposed to be fecal, but as no opening could be found through the muscular tissues, and as no further symptoms pointing to a fistula made their appearance, it was decided that the odor was due to the decomposition of the serum which had accumulated beneath the skin. The wound was cleansed and brought together by means of three silkworm gut sutures and recovery was uneventful. The patient was discharged cured June 4, 1897.

Case 5.—J. O., male, aged 15 years, came under my care as a private patient May 13, 1897, suffering from the ordinary symptoms of an acute attack of appendicitis. He was treated by absolute rest in bed, calomel in divided doses, together with salines and a liquid diet.

May 20 there was great tenderness in the right iliac fossa, temperature of 102.5 F., rigidity of muscles of right side of abdominal wall, a tendency to keep the right thigh flexed on the abdomen and a circumscribed swelling in the region of the appendix. I operated at 5:15 P.M. About eight ounces of very offensive curdy pus was liberated and the cavity irrigated with a saline solution. The incision was closed by means of five interrupted silkworm gut sutures, leaving room for a small iodoform gauze drain which was inserted. The patient was discharged June 3, having made an uneventful recovery.

Case 6.—A. J. S., aged 30 years, came under my care at about the same time as did Case 5. The two cases had about the same symptoms, tenderness and temperatures, and both were treated similarly up to the time that Case 5 required operative measures. This man, however, made a good recovery in about three weeks without any operation and has had no return of the symptoms, with the exception of slight pain, at times, in the region of the appendix, but not severe enough to call for further interference.

At this writing all of the above patients, with the exception of Case 1, are well and attending to their usual duties.

In my own practice and in consultation with my colleagues I have, in the past year and a half, seen about twenty cases of appendicitis of almost every degree of severity, and I have become thoroughly convinced that, as a rule, the surgeon is not called early enough in the development of the disease to get the best result.

In treating chronic recurrent cases, unless they progress badly, it is best to wait until there is a lull between the attacks, for this is the most favorable time for operation.

If we are convinced that an abscess is forming we should wait, if the case will allow, until the abscess wall is strong enough to withstand surgical interference.

In abscess cases I would never hunt for the appendix if it is not present in the pus cavity.

I believe the best method of removing the appendix is to cut it off close to the cecum and treat the wound thus formed as you would any other small wound in the intestine.

And finally, in my opinion, it is bad practice to apply blisters and like remedies over the region of the appendix, when treating the disease, because, if operative measures are subsequently adopted, there will be more probability of suppuration and sloughing in the wound.

SAVE THE PIECES.

Read before the Fox River Valley Medical Society April 27, 1897.

BY J. R. BARNETT, M.D.
NEENAH, WIS.

It is not long that "conservative medicine" and "conservative surgery" have been familiar terms to our ears; and yet by reason of their repetition it seems long. They would have sounded strangely in the mouth of a Watson or Erichsen, and were tentatively and diffidently spoken by a Flint and a Gross.

Every day has its surgical record which reads as if the word conservative had not been incorporated into the language of our art; and as if surgery meant only amputation, mutilation, disfigurement, and as if her chosen colaborer were that carpenter of prothetic art, the wooden-leg maker. If one had the power to glean the facts and give a clinical report of the needless mutilations of yesterday, done under the stress of supposed necessity, of fingers and toes, hands and feet, arms and legs, amputated because their salvation was doubtful or deemed impossible, it would be a ghastly record. Preservative surgery is a term more in harmony with our conception of a surgeon as one whose art is invoked to save, first the man, and next, as much of the man as possible. Our old student admiration for the surgeon who could complete a major amputation in four minutes by the watch, and triumphantly exhibit three-fourths of a man as secured to life, if laudable pus but crowned his skilful work, is now quite misplaced. The compound fracture and the lacerated tissues that justified it then would offer no defense now. We have to answer to our conscience, the question, can the limb be saved, even at a little greater risk to life, and at the added cost of much longer, pains-taking and unattractive care in the after-treatment? We have even to face the clamor, grown popular as well as professional, for an aseptic operation that shall make even laudable pus both unlaudable and reprehensible, and that shall make the final treatment of the wound a matter of one or two dressings. The surgeon delights in such an operation, and the people look upon anything less as evidence of unskilful work. Nevertheless, the present requirements of our art are such that we must face the charge of reactionary and retrogressive tendencies, since preservative surgery means something of a return to the patchwork of olden times, and something of a flouting of that potent organism, not then recognized in high scientific circles, the pus microbe. If we are to save the pieces, we must often save them in company with several busy colonies of that same microbe, which not all the antiseptic scrubbings and irrigations will with certainty avail to wash away or kill. A hand mangled on the deadwood, or crushed in the dirt of the street, is the certain host of innumerable germs; and the temptation to dispose of both host and guest, once for all, by a few touches of the knife and saw, is a deadly one; but it is a temptation to be resisted so long as whole blood vessels and nerves traverse any portion of the mangled member. Every finger and part of a finger in which life can be kept should be spared, even if the bones are fractured, and the fractures are compound. Is its integument partly gone? Patch it up.

Is a partial excision necessary, with any part of the saved member of doubtful vitality? Patch up an excess of integument at the amputated part to hold in reserve for the possible needs of repair later on. If such repair is needed you will bless your provident forethought; if it is not needed the redundant integument will atrophy and disappear, if not too great, or it can be easily trimmed away.

Frost bitten members should be put in a protective dressing until nature points out the utmost limit of vitality; and the saw or bone forceps should be about the only instrument needed to complete the amputation; for nature has shaped a bloodless flap, which will fall naturally enough over the end of the severed bone.

Burns of the extremities, involving the deeper tissues, should be treated in the same way. The preliminary waiting will be safer, for the destructive agent has sterilized the part with the utmost thoroughness.

To discuss conservative operations with reference to prothetic aid later on, would need both more time and an abler essayist. The question has been much considered from both sides, and both sides have seemingly strong arguments.

Permit me to outline a few cases:

Case 1.—A workman in a planing mill had the back of his hand so lacerated by a saw that the integument was literally in strips. Some of the extensor tendons were shredded up and some of the phalangeal bones uncovered, and in a few places sawn through. Every finger, including the thumb, had at least one joint opened up and more or less injured.

The shredded, soft tissues were trimmed away, the multiple lacerations carefully sutured, and a protective dressing and splint applied. A thoroughly useful hand was saved, and one not greatly impaired in its necessary movements.